

AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

*"O fortunatos nimium sua si bona norint
Agricolas." . . . VING.*

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AGRICULTURE.

From the London Farmers' Journal of May 11.

AGRICULTURAL ASSOCIATION.

Palace Yard, Westminster, May 1, 1820.

At a meeting of the general Committee of management appointed by a general meeting of the associators from the several counties in England, then present, to conduct and prosecute, in both houses of Parliament, the claims of all the subscribers to this association, and of the whole Agricultural Community throughout Great Britain and Ireland, to equal protection with the merchants and manufacturers upon the terms and conditions of the original resolutions of this association, agreed to on the 14th day of January, 1819.

The proceedings of the last general meeting were read; when the chairman made the following report to this meeting.

The report of Geo. Webb Hall, Esq. chairman of the general committee of management for the Agricultural Associations in Great Britain and Ireland, made to the said committee at Henderson's Hotel, on Monday, the 1st day of May, 1820.

Gentlemen,

I have to report to you, that in execution of the trusts reposed in this committee by the general meeting held in this place, on Monday, the 25th day of October last, I have taken upon myself to send to the chief magistrate in every town in England, Wales, Scotland, and Ireland, and to circulate, in various other parts of the United Kingdoms, copies of the origin and proceedings of the Agricultural Associations in Great Britain, which has produced a very considerable effect in confirming, extending and enlarging the Associations then formed, and has added many new associations to the general cause: that I have held a most extensive correspondence with almost every county in England, and with several in Wales, in Scotland and in Ireland, and I have particular pleasure in reporting to you, that the associations, generally have acquired no inconsiderable accession of strength and consistency since I had last the honour of meeting you in this place.

Gentlemen—We are now assembled for the purpose of entering on one of the most arduous tasks ever before confided in this or any other nation, to so small a number of men.

Gentlemen, I will not conceal from you that the most difficult point we shall have to encounter, is the opinion which men of all ranks and descriptions, not only in the United Kingdom but throughout Europe, have imbibed, viz. That the amazing wealth and power which this mighty nation has displayed is derived from her commerce and manufactures, rather than from her agriculture; and there-

fore it is that the interests of our agriculture have been for centuries past more or less sacrificed to the supposed, although mistaken, interests of her commerce and manufactures. But those who investigate this matter more profoundly will ascertain, that it is from the unceasing industry and energies of her inhabitants, protected as they are by her unrivalled Constitution, the fertility of her soil, her boundless mines of coal, and the union of agriculture, commerce, and manufactures, in one and the same people, that the United Kingdom of Great Britain and Ireland has surpassed the whole world in wealth and power, as she has in arts and in arms; and that all the present sufferings of her people arise simply and solely for want of preserving a due equilibrium between her agriculture, her commerce, and her manufactures. She has sacrificed the former to the mistaken interests of the two latter sources of her wealth and power; and being well assured that no redress can be expected until this committee shall satisfy the Legislature, his Majesty's Ministers and the public, of the dependance not only of the commerce and manufactures of this country, but

of THE REVENUE also upon her agriculture, I have spared neither time nor pains to demonstrate this fact by such a comparative statement of the profits of each to the country at large, as I doubt not when it shall be thoroughly investigated, will set this question at rest for ever. I therefore crave your most serious attention and your most minute investigation

of the following comparative view of the profit to the United Kingdom of Great Britain and Ireland, arising from her AGRICULTURE, her COMMERCE, and her MANUFACTURES; by which it is clearly demonstrated, that the depreciation of her wealth, occasioned by the import of foreign produce, *duty free*,—and which she might grow on her own soil—amounts to a much larger sum than she ever cleared by all her commerce and manufactures put together whether from home consumption or foreign markets: from whence it may be fairly inferred that all her present embarrassments arise from this single cause. Dr. Colquhoun, in his treatise on the wealth, Power, and Resources of the British Empire, estimates the *property created in Great Britain and Ireland in the year 1812-13*, as follows:—

Agriculture and all its branches, £216,817,624
Mines and Minerals, coals, &c. 9,000,000
Manufactures in every branch, 114,230,000
Inland trade in all its branches, 31,500,000
Foreign commerce and shipping, 46,373,748
Coasting trade, 2,000,000
Fisheries, exclusive of the colonial fisheries of Newfoundland, 2,100,000
Chartered and private Bankers, 3,500,000

Total,

Without staying to inquire whether the Doctor is correct in all these branches, it is sufficient here to state, that this estimate having been prepared anterior to 1814, and published in that year, it could not be fabricated to serve the purpose of the agriculturists; and if we check this estimate by the payments on the property tax, we shall be astonished at the coincidence and corroboration which the Doctor's estimate derives from this criterion. I therefore take the estimate altogether for better or worse, in all its branches, as sufficiently accurate to draw a comparison of the national profit on each branch, and which, when analized, will appear as follow:

Agriculture, and all its branches in Great Britain and Ireland, £ 216,817,624

Of This creation, I may fairly estimate 1-4th as the rental or net profit to the land owners for Great Britain and Ireland, 54,204,406

To the cultivators of the soil for the profits of stock, skill, and capital, I allow 3-4ths of this sum as clear gain, viz. for Great Britain and Ireland, 40,653,304 ℓ . of which I estimate for the cultivators of Great Britain 4-5ths,

To the cultivators of the soil of Ireland 1-5th, 32,522,644

Tithes for Great Britain alone in 1814, 8,130,660

2,732,898

Deduct these four sum from the amount created and we leave £119, 227,016, for wages, maintenance of working cattle, seed, poor's rate and taxes, &c. &c.

Mines and Minerals, Coals, &c. 9,000,000 ℓ .

Of this creation I reckon 12 $\frac{1}{2}$ per cent. or 1-8th for the lord's share, 1,125,000

The like for the farmers or workers of mines, 1,125,000

Deduct these two sums from the amount created and we leave 6,750,000 for wages and working the mines, &c.

Total profits on the production of the soil in 1813, 99,840,608

By which it appears that in 1813, the productions of the soil of Great Britain and Ireland yielded to the owners and occupiers thereof the *net clear profit* of 99,840,608 ℓ . to be expended in this country, whereby all ranks and conditions of men were alike benefited and employed, and the taxes were paid with facility: but in 1814, by the import of foreign produce, *duty-free*, or nearly so the productions of the soil were depreciated one half of their former value, and they have since aver-

ged a depreciation of about one third of their value in 1813, which depreciation has diminished the currency of the United Kingdom and reduced the value of every other species of property in the same proportion, and produced the universal stagnation in every other business of which all complain, but so few, can solve the cause.

Manufactures in every branch £14,930,000.

Of this creation, I cannot reckon more, and I presume the manufacturers will not claim, as *net profit*, than 12½ per cent.; the residue of the sum created is all capital, wages, and dead charges; *the total profit therefore to Great Britain and Ireland on all her manufactures is,*

£14,278,000

Inland trade in all its branches, £31,500,000.

Of this creation, I reckon for the same reasons, the same 12½ per cent. *net profit*,

Foreign Commerce and Shipping, £46,373,748.

Of this creation, the same 12½ per cent. *net profit*,

Coasting Trade £2,000,000,

Of this creation, the same 12½ per cent. *net profit*,

Fisheries, £2,100,000.

Of this creation, the same 12½ per cent. *net profit*,

Chartered and Private Bankers, £3,500,000.

This being the creation of profit upon a capital of £40,700,000 we carry the whole as profit,

Total net profit to the nation on all the boasted commerce and manufactures of Great Britain and Ireland only !!!

£28,025,468

I will now proceed to check these results by the several payments on the property tax.

First, I deduct 1-5 of the sum of £4,204,406 above stated as the rental of Great Britain and Ireland, for the share of rent on land in Ireland, not charged to the property tax, which leaves the sum of £43,363,525 as the net rental of Great Britain according to Dr. Colquhoun's estimate.—The payment to the property tax in Great Britain in 1814, 15 to Schedule A, property in land, was £5,297,247, which multiplied by 10, ascertains the rental of Great Britain according to the payments on the property tax at the sum of £42,972,470, leaving only the trifling difference between the Doctor's estimate and the actual payment on the property tax, of £391,055.—The first item, therefore, may be taken to be proved to demonstration as the profit from rent in Great Britain and Ireland.

The next item is for profits to the cultivators of the soil of Great Britain, £32,522,644. They were charged and paid to the property tax the sum of 2,176,228, which at the rate of 7½ per cent. on their profits for England and Wales, and I believe less for Scotland, charges them with a profit of £20,016,373. So that

here again we have demonstration, almost to a fraction of the truth of the Doctor's estimate, and of the proportion of it which I have allotted to the cultivators of the soil of Great Britain as profit—for I apprehend the allowances made to small tenants will fully balance the difference.

I have no mode of checking the estimate of profit for the cultivators of the soil of Ireland, but the amount is so reasonable and so proportioned to what we can check, that I think no man will dispute any slight variation which might exist between the sum I have estimated and the fact.

The next item is for tithes, £2,732,898; this being the amount returned to Parliament for 1814, no man can deny that this was so much net profit from the soil of Great Britain in that year.

The last sum is for mines, minerals and coals; and supposing that Dr. Colquhoun is right in the aggregate, no man can assert that the respective proportions of profit which I have assumed are at all unreasonable, but the fair and usual returns of profit actually derived from the working of mines in general.

Thus I have established by facts and figures, borne out and corroborated in every instance by the actual payments to the property tax, which amount to demonstration, that the net clear income of Great Britain and Ireland, arising from the land and the skill, capital, and industry of the cultivators of the soil, did amount in the year 1813, to the enormous sum of, at least, 99 millions eight hundred and forty thousand six hundred and eight pounds; and we have the evidence of facts before us, that up to that year, and as long as this stream of wealth was received and flowed through every vein and artery of the state, our taxes were paid with facility, our labourers were fully employed, our commerce and our manufactures flourished, and all ranks prospered in defiance of our heavy taxation; at that time much greater than it is at present. But in 1814, as soon as foreign productions, which might be

grown upon our soil, were admitted duty-free, or nearly so, to compete with our own productions, the agriculture of the country was first paralyzed, most of our productions fell 50 per cent. while sales were made with difficulty even at this depreciation; confidence in men and in property were alike annihilated in a moment, and all our subsequent embarrassments are but the effects of that mistaken policy, which induced the Legislatures in 1814 to listen to the popular, but fatal cry, of *cheap bread*; and to permit the import of any productions which might be raised from our own soil, upon terms which might produce an artificial reduction in the value of our own produce.

But let us now compare the Doctor's estimate of property created by our commerce and manufactures, and the profits which I have allotted on such creation, with the payments which the merchants and manufacturers have made on the property tax.

Estimating the profits all around, on the sums created at 12½ per cent. except the chartered and private bankers, which on a capital of

£40,700,000, the Director has estimated at considerably less than 12½ per cent. we obtain a sum total of the profits on manufactures in every branch, Inland Trade in all its branches, Foreign Commerce and Shipping, Coasting Trade, Fisheries, and Chartered and Private Bankers, of no more than the sum of £23,025,468 for Great Britain and Ireland. Of this sum I write off one fifth for the share of Ireland, which leaves a net total for Great Britain alone of £22,420,375 for profit, and no more;

and I then turn to the payments under the Property tax, and find schedule D. trades paid £2,000,000, which again proves to a demonstration how nearly the Doctor's estimate of the truth is to the fact. For if the merchants and manufacturers of Great Britain really paid to the property tax, upon profits to the amount of £20,000,000, and actually made no more than £22,420,375, no man can say, when all the contingencies of trade are taken into account, that they did not pay most handsomely and honourably to the Property Tax.

Thus gentlemen, have I at last placed upon a rock, which all the merchants and manufacturers in Great Britain can never assail with effect, the true proportions of profit to this great nation arising from her AGRICULTURE, her Commerce and Manufactures. The productions of the United Kingdom, up to 1813, did yield a profit to the nation of no less a sum than £99,140,608 while her commerce and manufactures during the same period, yielded a profit of only £28,025,468

Leaving a preponderance in favour of agriculture and the productions of the soil over commerce and manufactures, of 71,815,140 Or considerably more than twice the amount of all the profits made by the commerce and manufactures of Great Britain and Ireland put together. Yet this agriculture, this unfathomable mine of wealth, as long as it shall be duly protected, has this great nation sacrificed to the mistaken views of her merchants and manufacturers, who contend that they cannot compete with foreign manufactures in foreign markets with their woollens, their earthenware, their hardware; and their manufactures generally, unless bread be artificially cheap in this country; and by which artificial reduction, a defalcation in the returns of the productions of our own soil for the last six years, of considerably more than twice the amount of all the profits ever made by our commerce and manufactures for both our home and our foreign markets have amounted to, has arisen, and a great proportion of our labourers, both agricultural and manufacturing, have been thrown upon their parishes for subsistence. Such, gentlemen, are the facts, the figures, and the results on which we ground our application to the Legislature for that protection, on all the productions of our soil, which the merchants and manufacturers have so long enjoyed for their skill, capital, and industry.

The data which Dr. Colquhoun has afforded me are corroborated and borne out in every instance by the payments to the Property Tax; and from the statement of profits respectively

which I have formed, we have the glorious result, viz: That the cultivators of the United Kingdom did by their skill, capital and industry employed in agriculture in 1813, earn for the land-owners, the clergy, and themselves, a net clear profit of £99,840,608; while in the same period, all the boasted results of all the commerce and manufactures of the United Kingdom, both at home and abroad amounted to no more than a profit of £28,025,468.

If this statement will not convince the Legislature, His Majesty's Ministers, and the British public, of the justice, the policy, and the necessity of equal protection for the skill, capital, and industry of the cultivators of the soil, with the merchants and manufacturers, nothing but a continuation of their present sufferings can ever do so. For it is as clear as facts and figures can demonstrate, that if the productions of our own soil have depreciated one third in value per annum since 1813, by the introduction of foreign produce duty free, then has it cost this nation the third part of the £216,817,624, or the sum of £72,272,541 per annum, for the single purpose of enabling our merchants and manufacturers to vend from £10,000,000 to £15,000,000 worth of their commodities in foreign markets, whereby a profit of a million and a half, or at most two millions sterling, may be gained, to set against this awful depreciation of £72,272,541, and by which depreciation the labours of every man in the United Kingdom, seeking to gain a livelihood by skill, capital and labour, have been arrested, a large portion of our agricultural and manufacturing labourers have been sent to the parish for subsistence, the value of our lands have been reduced; our cultivators are dispirited and broken down, and finally, every other branch of industry is paralyzed, because no longer supported and fed by the copious stream which gave motion to the whole, as long as our own productions maintained a remunerating price in our markets.

I have the honour to be Gentlemen,
Your most obedient and most faithful
servant,

GEO. WEBB HALL.

FROM THE MASSACHUSETTS AGRICULTURAL JOURNAL.

Of Salt as a Manure.

[In England, considerable attention has been attracted of late, to the use of salt as a manure. The following extracts from a work, recently published in London, entitled "A letter to the Farmers and Graziers of Great Britain on the advantage of using Salt, in the various branches of agriculture and in feeding all kinds of farming stock, by SAMUEL PARKES," will present to the farmers of the United States, the leading facts and considerations connected with the topic of salt as a manure.]

"In some parts of Great Britain, particularly in the neighbourhood of the Salt Works, the value of Common Salt, as a manure, is well known and acknowledged; and it has lately been given in evidence before the select committee of the house of Commons, by a gentleman of the highest credit, that the farmers in Cornwall are so convinced of the value of Salt as a manure, that whenever the waste Salt that has been employed in curing fish is on sale, there is a violent contention among the occupiers of the land who shall obtain the largest share. The same gentleman informed the committee, that where wheat or barley has followed turnips on land which has been

salted, the ensuing crop has invariably escaped the mildew, although that disease has affected all the corn upon the lands immediately adjoining, on which Salt has not been used.

"There is also a practice in Cornwall of manuring the lands with sea sand for the sake of the Salt that it contains; and so very efficacious is this found to be, that a writer, ninety years ago, computed the money to amount to thirty-two thousand pounds per annum; and so much has the practice increased of late years,

particularly in the grazing districts. It has repeatedly been observed, that if land be manured with dung after the hay has been carried off, the neat cattle will refuse to eat the edditch which grows upon such land. On the contrary, if a field be dressed with about two bushels of fine Salt per acre instead of dung, soon after the hay is cut, this inconvenience and loss will be avoided, and a large crop of after-grass will be obtained, possessing such peculiar sweetness, that all kinds of cattle, as well as horses, will eat it with the utmost avidity.

"The farmers in some districts, are accustomed to steep their seed-corn in lime-water, and doubtless the practice is often useful; but I am decidedly of opinion that a strong brine, made by the solution of Rock Salt in water, will be infinitely more efficacious. Crops of wheat are often reduced one half in value by a disease to which this kind of grain is very liable, called the *smut* or *rust*; but when the seed has been properly prepared with Salt, this misfortune can never happen. It has also been proved by some public-spirited individuals, who have made the necessary experiments, that the scab is never found upon potatoes which have grown upon land that has had a proper dressing of Common Salt.

In many parts of Flanders, but more particularly at Lisle, it is the practice to preserve the urine of those cattle that eat Common Salt with their food.—This is preserved in appropriate reservoirs and when the farmers apply it to a certain description of land, which experience has taught them to select, the effect, even without any other manure, is not only advantageous, but it is truly astonishing."

Extracts from old writers of credit on the employment of Common Salt in Agriculture.

Gervase Markham, a learned writer in the reigns of James the 1st and Charles the 1st, who was equally noted for his skill in many foreign languages, and for his knowledge of the various branches of agriculture published a great variety of treatises on the management of land, and closed his agricultural labours by the publication of a work entitled "Markham's Farewell to Husbandry," in which the following passages occur. "If you be near unto any part of the sea-coast, thence fetch great store of the salt sand, and with it cover your ground which has been formerly ploughed and hatched, allowing unto every acre of ground three score or fourscore full bushels of sand, which is a very good and competent proportion; and this sand thus laid shall be very well spread and mixed among the other broken earth. And herein is to be noted that not any other sand but the salt is good or available for this purpose, because it is the brine and saltiness of the same which breedeth this fertility and fruitfulness in the earth choking the growth of all weeds, and giving strength, vigour, and comfort, to all kinds of grain or pulse, or any fruit of better nature." Page 5.

"Now methinks I hear it objected, what if the ground do lye so farre within the land, that there is no salt-sand within many score miles of it, how then shall I make good my barren earth? To this I answer, that albeit this salt-sea-sand be of infinite good and necessary use, enriching grounds wonderfully much; but if your ground lye much within land, and farre from the sea, then to every acre of land you shall take two bushels of very dry bay-salt, and in such manner as you sow your wheat you shall sow this salt upon the ground; then immediately after the sowing of the salt you shall sow your wheat, which wheat would be thus prepared before you sow it. The day before you are to sow your grain, you shall take bay-salt and water, and mixing them together make a brine so strong that it will bear an egg; then put the wheat you are to sow into that brine, and let it steep therein till the next day; then drain it from the brine and so sow it; and no doubt but you shall find a marvellous great increase thereby. Neither is the thing itself without good and strong probability of much increase, and strength for the bettering of all manner of arable grounds; for there is nothing which killeth weeds, quicks, and other offences of the ground, so much as saltiness." Page 12.

In the chapter respecting the treatment of land

over-run with weeds, he directs such land to be covered with a certain black plant growing on the sea-shore, which is to be ploughed in, and the ground harrowed; it is then to be sown with pigeon's and pullet's dung mixed together, allowing to every acre two or three bushels thereof, and he adds, "but in case you can neither get Salt, sea-sand, nor sea-weeds, then you shall by no means omit the steeping of your seed, neither shall you fail before you sow your seed, to mix with your pigeons' and pullets' dung a full equal part of bay-salt well dried and broke, and so sow with the dung upon the land, and then the seed after it." Page 17.

In chapter V. entitled "of the ordering of all barren clays that are over-run with ling or heath," after giving directions how to make and dress the land, he adds, "And if the ground have been sanded (with salt sea-sand) you may sow your seed wheat simply of itself, without any doubt of the plentiful increase thereof: but if it have not been sanded, then you shall not only steep your seed in brine, but also you shall mix your seed with bay-salt, and so sow it into the ground." Page 27.

In the chapter which treats of the method of recovering such land as had been rendered steril by the overflow of sea-water, Mr. Markham writes thus:

"In all my former relations, touching the bettering of ground, I do apply, as one of my chiefest ingredients, salt-sand, salt-weeds, salt-water, salt-brine, ashes, and many other things of salt nature, as indeed all the manures and marles whatsoever must either have a salt quality in them, or they cannot produce fruitfulness; so that it might be argued, if Salt be the occasion of fruitfulness and increase, then there cannot be much hurt done by these overflows of the salt-water, that it should rather add a fattening and enriching to the ground, than any way to impoverish it. But experience shews us the contrary; and that there is nothing more noisome and pestilent to the earth, than the superabundance and too great excess of saltiness, &c. Page 50.

In the chapter of enriching on barren grounds for the growth of hemp and flax, he directs first to plough it, "then with the salt sea-sand, you shall sand it very plentifully, but if that be not to be gotten, and you be very well assured of the natural richness of the earth, you shall then sand it with the best red sand you can find near unto you, and upon every acre of ground you thus sand with fresh sand, you shall sow three bushels of bay-salt, and then plough up again the earth, sand and salt together, which should be done about the latter end of the year, as after Michaelmas, and so let the ground rest till seed-time, at which time you shall bring sea-weeds to your hemp-land, and cover it all over with the same, and then you shall plough it again, burying the weeds within the earth. As for the weeding of this ground, you shall not respect it at all, for it will put up no weed." Pages 67 and 69.

In the chapter on vermine, Mr. Markham says,—"The next great devourers of grain are pismires or ants, which although it be but a little creature, yet it is so laboursome, that the grain which they carry away or destroy, amounteth to a great quantity. If you manure your corn lands with ashes or salt sand you shall be well assured it will never breed pismires." Page 75.

"The great Lord Bacon, who flourished early in the seventeenth century, having noticed the advantages which the farmers of Cornwall, Devon, and other maritime counties, derived from the free use of sea-sand, which upon those coasts chiefly consist of broken shells impregnated with salt water, declares that the best manure next to marble is sea-sand, which no doubt, (says his Lordship) obtaineth a special virtue by the salt-water, and concludes by affirming that salt is the first rudiments of life."—*Natural History Cent. 6, Exp. 596.*

In the Philosophical Transactions, is a memoir by the Archbishop of Dublin on the manuring of lands in the counties of Londonderry and Donegal, in Ireland, with sand and shells from the sea-shore, from which I extract the following passages. Treating of boggy land, he says:—"The turf is nothing but the product of vegetables, which rotting, there remains only

the earthy parts; now shells being chiefly salt, the salt incorporates with the sulphur of the plants, and renders them fit for the vegetation of new plants, which further appears from this, viz.—that those shells which have been under the salt water, are much better than such as lie dry on the strands. Some thousands of acres have been improved by these shells, and what formerly was not worth a groat per acre is now worth four shillings. Some years ago they made lime of the shells, and manured their lands with it, but a poor man, who from laziness or poverty, had not provided to make lime, threw the shells unburnt on his land, and his crop proved as good as his neighbours, and the second and third crop better; and all took the hint, and have used them so ever since. Where shells are not to be procured, sea-wrack or sea-sand supply the want."—*Philosophical Transactions, No. 314.*

Soon after the formation of the Royal Society, Dr. Bury delivered a memoir, containing an account of the manuring of land in Devonshire, with sea-sand, which is much to our purpose. "Salt" says he, "quickeneth dead land, and is used in the south-west part of that county, which would otherwise be the barrenest, but is now the richest part thereof. The inhabitants go as far as the sea will permit them at lowest ebb, take the sand in bags and carry it on horseback 14 miles into the country, and spread it on the land, thereby improving it both for corn and grass. Crude Salt alone, if strewed upon the ground, does not improve but corrode it.

Extracts from more modern writers on the use of Salt in Agriculture.

"I am well assured from a Scotch gentleman, that they have long used salt in that part of great Britain, always sowing ten or twelve bushels by hand of their coarse salt on an acre of young green wheat, sometime in November, December, January or February, it being from the several accounts which I have had of it, very effectual in the killing of tender weeds amongst corn, yet at the same time cherishing the corn—and though it does not add altogether to the bulk or height of the straw, yet it does much to the goodness and plumpness of the grain. And whoever has been curious in their remarks abroad, will find that it is the usual practice of the Milanese to sow Salt on their pastures, as I have been informed by one who has sold great quantities for that purpose; as also by a merchant of Liverpool, who is well acquainted with that trade, who affirms that the finest crops they have of hemp and flax amongst the Dantzicks and others, who raise those commodities in those countries, are from lands on which salt is strewed."—*The Practical Husbandman, 8 vo. London 1733, vol. i. p. 48.*

"Salt certainly sweetens the grass much; and it may on all such occasions be mixed with a proper quantity of dung, which is more sulphureous than Salt, and will make grass shoot away much faster than any other manure. Lime in its own nature makes grass sour, but when mixed with salt, that acidity will be taken away."—*Practical Husbandman, vol. i. page 57.*

"As to the proportion of Salt to be used on land it ought to be according to the nature of it; cold, wet, clayey land requiring more, and loose soft sand though it be poor requiring less. Again, the proportion of Salt ought to be either more or less according to the crops of grass or grain you would improve. For cold, wet and spewy land, ten loads of dung, six of earth, and eight bushels of Salt per acre.

For lean, hungry sandy land, fourteen loads of pond earth, six loads of dung and six bushels of Salt per acre when employed for corn and grazing.

For meadow land fourteen or fifteen loads of dung, five bushels of Salt and four of pond earth, the quantity of each to be altered according to the quality of the ground."—*Practical Husbandman, London, 1738, p. 59.*

"On watering meadows with a solution of salt, we are directed to make a large pit, about twenty or thirty feet square, and five or six feet deep, more or less, as there will be occasion, in the method tan or salt pits are made, and put therein ten or twelve

other ingredient of that kind, and, having a pump near at hand, or some conduit or spring of water, fill the pit up by degrees, at first to three or four feet high, letting the ingredients dissolve in the water, by being there twenty-four hours at least, stirring them sometimes about, and after that, by dipping in of the finger it will be found whether the water is salt enough (as near as you can to the strength of sea-water:) if it is not sufficient, then may be added a reasonable quantity more of the above-mentioned materials; but if it be too salt, then more water may be poured in till it is just right and fit for use; and being possessed of a moving pump or a skip, pump the water into a hogshead, with a leather pipe, and a watering rose at the end of it, just as is practised in watering the streets in London, and so (having the hogshead placed on a roll) may both meadows and corn land be watered to a good advantage."—*Practical Husbandman, vol. i. page 74.*

"To show an acquaintance of mine the effects and advantages of Salt properly applied to vegetables, I made the following experiment, in an extreme dry summer, upon a bare piece of pasture land, out of which the cattle were all taken for want of grass: I marked four places with stakes, each of which I watered nine nights successively, in the following manner:—the first with spring water alone, to the quantity of a gallon; the second with the same quantity of water, adding an ounce of common salt; the third and fourth with the same quantity, mixing the water in the third place with two ounces of salt; and that in the fourth with three ounces, which produced the following different effects.

"The grass in the second place grew more and of a darker green than that in the first; in the third, it only grew by spots, for a part of it was killed where the greatest quantity of water fell, and the fourth was quite brown for a greater compass than the third; by which it appeared that an ounce of salt in a gallon of water had a better effect than the water had alone; and that three ounces of Salt, mixed with a gallon of water, was more than the grass could immediately receive; but the fourth place in the ensuing spring was the most fertile of them all."—*Treatise of Fruit Trees, by Thos. Hitt, 8vo. third edition, London, 1768, page 17.*

"Having tried Salt upon a small scale on a sandy soil, I can assert sixteen bushels to be a proper quantity for one acre. It gradually advanced in its effects to sixteen, and as gradually diminished to forty bushels, when vegetation was destroyed. Twice only have I had an opportunity of buying a few tons of foul salt and used it both times in a barley tilth, sowing the salt immediately after the barley. The event was perfectly satisfactory. The verdure of the spring exceeded any thing of the kind I ever saw; and the ripened appearance was whiter by many shades than I ever beheld. N. B. Salt is noxious both to weeds and vermin."—*R. Legrand, Esq. on Manures, in the Annals of Agriculture, vol. v. page 149.*

"Salt," says Mr. Hollinshead, "will be found to be the cheapest, best, and most durable manure ever yet made use of."

"When Salt is used upon pasture-lands, it may either be sown upon them in its simple neat state, after the rate of sixteen bushels the acre, or mixed with compost, mud, or loamy earth; sixteen bushels of Salt to twenty loads of earth, and turned in the heap two or three times to incorporate it properly; this compost should be laid on and spread in the autumn."—*Page 13—18.*

"For meadow-lands, we would advise the farmer to sow six bushels of Salt per acre, immediately after the hay is got in. This would be found peculiarly beneficial in hot and dry summers, and upon limestone and sandy soils; which, after they are mown, are often so much parched by the heat of the sun, that not only the eddies are destroyed, but also the crop of the ensuing year is very materially injured; but by sowing it with Salt, moisture would be attracted and retained, sufficient to assist vegetation so powerfully, as in a short time again to cover the face of the ground with grass, and by that means effectually to screen the roots, which would otherwise be too much exposed to the direct rays of the sun."

It may, indeed, be said, that dung will answer the same purpose: in some degree it might, but dung cannot always be had, and never in sufficient quantities: besides if it could, this objection lies against it, that neat cattle will not eat the eddih after dung, consequently one valuable crop is lost to the farmer, which, if Salt were used, would be both productive and wholesome. Also, the hay, when put into the mow or stack, should be sprinkled with salt on every layer. When hay is housed soft, this should never be omitted, as it would prevent what the farmers call the *mow-burn*, and make the hay far more pleasant and nutritious for the cattle in winter."—Page 18.

"Mr. Beck, gardener in Chorley, has constantly made use of Salt in his garden for upwards of thirty years, principally upon his onions; and he has invariably found the Salt to exceed every other kind of manure which he could have used for the like purpose; his method is, to sow the Salt immediately after the seed is covered in. But as he never had any thought of communicating his observations and experiments to the public, he took no care to ascertain the exact quantity necessary to be sown on an acre, and proportionately upon any smaller quantity of ground: yet he thinks, if he might hazard a conjecture, that he has not sown *less*, but probably *more*, (of waste Salt) than *sixteen bushels* per acre. One year, by way of trial, he sowed the usual quantity of Salt upon a plot of onions, *after* they had begun to show themselves above ground, and the crop, so far from being improved, was entirely spoiled; from this he infers, that the experimental gardener, who may be inclined to make use of Salt, will do well to throw it on as soon as possible after the seed is sown."—Page 20.

"A farmer at Glasson, near Lancaster, has for some time been in the habit of carting Salt-water to put upon his dung whilst in the heap in the yard, before it was taken to be spread upon the ground, which he has found by experience very much enriches the dung, and makes it better manure. A great advantage might also be derived to the farmer from spreading sea-sand under and amongst the dung, whilst it is collecting, during the winter, and also in the cow-house, stable, and yard, not only on account of the particles of the Salt contained in it, but likewise by its retaining and absorbing the urine of the cattle, which is itself a very excellent manure."

"A farmer in the county of Sussex, some years ago, had a field, one part of which was very wet and rushy, and the grass produced upon it was of so sour and unpleasant a kind, that the cattle would not graze upon it; he tried several methods to improve it, but to little purpose; at last, having heard of the benefits of Salt as a manure, he determined to try that; for which purpose he procured a quantity of Rock Salt, which in a random way, without any regard to the precise quantity, he threw upon this rushy ground, fencing it off from the other part of the field; the first effect of which was a total disappearance of every kind of vegetation. In a short time after, however, it produced the largest quantity of mushrooms ever seen upon an equal space of ground in that county. These in the spring following were succeeded by a most plentiful and luxuriant crop of grass, far exceeding the other part of the field in the richness of its verdure and the quickness of its growth: the cattle were remarkably fond of it; and though the Salt was laid on it *upwards of twenty years ago*, this part is still far superior to the rest of the field."—Appendix to Mr. Hollinshead's pamphlet, page 33—35.

"Salt is the mother of all manures, as every kind of manure is higher or lower in value according to the Salt it produces; and every kind of manure is portioned out to the land according to the quantity of Salt or nitre it is thought to have in it. Formerly, Salt was thought to be an impoverisher of land, but experience has taught us wisdom; it is now found to be otherwise, provided it is duly proportioned to the state the land is in, and mixed to mollify it as follows: take ten bushels of Salt, and six bushels of dry ashes, and mix all together; then spread them on the land, and harrow them in with the seed: this is a sufficient dressing for an English acre, as it is better to repeat the dressing than to lay too much on at once. By being thus mixed one particle incorporates and mollifies the other. Salt it to arable land. In large quantities it has a tendency

self is rather too severe and harsh in its nature, and if laid too thick on, might prove of bad consequence; but if conveyed into the earth by a soapy, smooth method, will prove the real enricher the earth wants to send forth vegetation; this dressing will last for three crops. Seaweed, shells, fish, sea water, sea-sand, have in them a proportion of salts or nitre, and, therefore, must be esteemed a manure."—From C. Varley, Esq. communicated to the *Chester Chronicle* by the Rev. B. Dacre, of Moseley near Manchester.

"The following curious anecdote may be related as serving to illustrate the effect of Salt: Mr. Seckler made a little heap of earth in the midst of a field, on the top of which a cart load of refuse Salt was thrown; the earth in the heap itself, and (after its removal) the earth under it, for upwards of two feet deep to the clay, was rendered so perfectly barren, that the most common weeds would not vegetate in it. This barren earth, however, furnished the richest dressing for the remainder of the field. Mr. Seckler found Salt the best preservative against the mildew in wheat. When the wheat followed turnips with Salt, it escaped the mildew which attacked other fields which were not salted; and this he finds to hold universally good, as far as his experience goes. The improvement of bad hay, by Salt applied in the proportion of about one hundred weight to three tons, and sprinkled between the layers, is very striking, preventing mildew, and rendering it more grateful and beneficial to cattle, especially if the hay is bad; and even in good hay it is very greatly ameliorated. A testimony in favour of the benefit of Salt is furnished by the striking fertility of the land in the neighbourhood of the sea-shore in Cornwall; more especially in those situations which are favourable to the general distribution of the saline spray, as is exemplified in the parish of Fennor."

"An interesting detail from the Rev. E. Cartwright will be found in the fourth volume of communications to the Board of Agriculture, which is conclusive, as to the application of Salt as a manure for potatoes.—It appears from this communication, that the experiment could not have been tried on a soil better adapted to give impartial results. Of ten different manures which were resorted to, most of them of known and acknowledged efficacy, one only excepted, *Salt* was superior to them all. Its effects, when combined with soot, were extraordinary, yielding in a row two hundred and forty potatoes, whilst one hundred and fifty only were produced from the row manured with lime. It was observable also, where Salt was applied, whether by itself or in combination, the roots were free from that scabiness which often infects potatoes, and from which none of the other beds (and there were in the field near forty more than made part of the experiments) were altogether exempt."

"Sea-sand is very generally used in the county of Cornwall for manure, and the quantity which is every season carried away from different parts of the coast for the purpose of manure almost exceeds belief.—From Bude, in the parish of Stratton, it has been ascertained that in one day as many as four thousand horse-loads have been taken; and from the harbour of Padstow, it has been computed, that fifty-four thousand cart loads are annually carried. The expense of land carriage for sand, used in the county, has been considered as amounting at least to thirty thousand pounds annually.

"That the beneficial operation of this sand depends upon the presence of calcareous matter, there cannot be any doubt, but, at the same time, we are borne out by unequivocal facts, in believing that the Sea-salt, with which it is impregnated, contributes materially to its fertilizing powers."—Dr. Paris' *Memoir in the Transactions of the Royal Geological Society of Cornwall*, vol. i. 8vo. London, 1818, page 193.

Extracts from Papers published by the Right Honourable Sir John Sinclair, Baronet, on the Uses of Salt for Agricultural Purposes.

"Salt, if employed in large quantities, in its natural state, is hostile to vegetation, yet it operates advantageously, in various ways, when judiciously applied to arable land. In large quantities it has a tendency

like every other excessive stimulant, to disorganize and destroy the vegetable substances with which it comes in contact; but in moderate quantities, it promotes the growth of vegetables.

"It has been proved by Pringle, and Macbride, that though Salt will, in large quantities, prevent putrefaction, owing to its antiseptic properties, yet that it has an evident tendency to promote the process, when used in small quantities. Hence the advantage of mixing it in moderate quantities with farm-yard dung, and other animal and vegetable substances.

"An experiment was tried in Cheshire, of mixing grass roots and other rubbish harrowed off the land, with foul Salt; it was then incorporated with other manures; and the effects of this compost, on a crop of barley and grass seeds, is said greatly to have exceeded the most sanguine expectations that had been formed of it.

"A farmer mixed up a quantity of refuse Salt with the earth taken out of water furrows, and another portion of the same earth with lime. Of the two, the vegetation of that part of the field which had the *salt compost* laid upon it, was by far the healthiest and most vigorous.

"*Vermi*. Salt destroys vermin in the ground, by making them void the contents of their bodies, such evacuations being too powerful for them to withstand. It has this additional advantage, that the vermin thus become food for those very plants, which otherwise they would have destroyed.

"*Turnips*. "Equal quantities of salt, and of turnip seed, were tried on a small plot of a garden, by the author of this paper; and the produce was more abundant than from the same quantity of turnip-seed sown without Salt. The efficacy of Salt, as a destroyer of the turnip fly, or beetle, ought to be ascertained."

ABSTRACT OF ACCOUNTS OF Northern Cattle Shows and Fairs.

NO. III.

Communicated for the Farmer, and published for the consideration of Southern Agricultural Societies.

We now come to the state of New York, a state that has taken the place of Pennsylvania in public spirit, internal improvement, noble views of domestic policy, the importance of exciting emulation to excel in agriculture among her citizens, and in which, amidst their political squabbles, all parties now agree, all second and support those patriotic measures to advance the permanent interests of the country, which have been brought forward by the intelligence, unremitting zeal, and perseverance of Governor Clinton, in spite of the opposition that was at first directed against him, especially for his revival of the Grand Canal, after it had been put aside, as was thought, for ever, by a vote of the legislature in 1816; a work that will be an imperishable monument to his honour, and to the wise men who advocated it.

The 2d Jefferson Co. show and fair was held on the 28th and 29th Sept. at the village of Watertown. The stock and domestic animals far exceeded the exhibition of last year. The stock was chiefly young, and evinced an attention to this important branch of agriculture, surpassing the most sanguine expectations.

The domestic (household) manufactures were of a superior kind. On the 28th, the Committee of the society entered on the duties assigned them; on the 29th a ploughing match with horses, and one with oxen took place, and was engaged in by many—a quarter of an acre was the extent assigned for the trial of their skill. After this match, a procession was formed to the court house, accompanied by the band of 2d U. S. Infantry, then stationed at or near Watertown. The exercises at the court house began with the laudable custom of prayer, by the Rev. Mr. Banks—the Vice P. Major Gen. Brown, then delivered an excellent address, in which he noticed the progress of improvement in the county, from the time when it "afforded neither a supply for man's wants, nor a theatre for his virtues," to its present improved state. But his own introductory words must be

used:—"Our first labours were in the desert, and for models of that useful animal. The three years tractured more eyes than even the dazzling plate. The some of us know how solitary they were—the old steers of Mr. Tuttle, were unequalled in point of size and form. Twelve pens were filled with uncommonly fat hogs. But a regret is expressed at the insufficiency of the celebrated grass breed of pigs, which enable the farmer to make his pork at little expense. Will the editor of the *Ploughboy*, of Albany, favour us with a history of this breed, and of its shape of confirmed institutions, with subdivisions and advancement of most of the useful, and many of the ornamental arts in jurisprudence and in abundance.

"The extremities of these two periods are spanned by the short space of twenty years. I, myself, and some of you present, have traced the whole of them; the recollection of the incidents of this interval affording as the history of them does, a better commentary on the formation and progress of society in the United States, than any description which the ingenuity of man could give. The change wrought in the face of nature, in your condition, my own deeply altered state, justify my first declaration, that I address you under circumstances of peculiar exten-

The geographical division of the country is next given, as connected with agricultural purposes; his own plan of farming; advice on useful crops not commonly attended to in the U. S. particularly *carrots*; means of preserving the earth in heart, while under successive crops; wheat and grass husbandry; the importance of encouraging home manufactures, and other topics suitable to the occasion and circumstances of the county, follow. The whole address is most excellent—the General shews, that like his companion in arms, Jackson, he can write ably, as well as defend the cause of his country, by his arms.

Premiums on tillage, stock, domestic (household) manufactures and ploughing, have been offered. Committees were appointed to award them. In the first department 32 premiums were declared for the first and second best of various crops. The amount was given in some useful article of silver. Mr. Seth Bayley received a silver pitcher, value forty dollars, for the best managed farm in the county. The quantity of produce per acre is not mentioned, nor other particulars for which the premiums were given, but it is enough that improvement was indicated by them, and that superiority over other competitors was evident.

2d. 24 Premiums for stock were awarded. This is an important point, and should claim immediate attention from all spirited frontier settlers, where the range of pasture offers cheap facilities to constant full keep. One good pair of any stock in a country would, in a few years, work a great change in the appearance of the animal, and add to the profits of the farmer.

3d. The specimens of household manufactures were numerous; cloths, flannels, carpeting, yarn, cheese, maple sugar, currant wine, the most useful inventions in agriculture and manufactures, the best plough, straw hats and bonnets, were the subjects. The committee notice the superiority of the samples over those of last year, and particularly of the neatness of the bonnets, which were the work of females.

4th. Four premiums for ploughing were distributed, particulars are not mentioned. The procession was then formed to a large building granted for the purpose, (the successful candidates by themselves,) where a dinner in true farmer style was prepared. The head of Washington and the declaration of Independence, with the fac simile of the hand writing of the signers thereto, were placed at the head of the table.

The show of the Oneida county society, New York, took place on the 5th and 6th October, at Whitesborough. Two acres had been provided and divided into pens, by the citizens of that place. The Court House was open to the reception of specimens of grain in one room, and the east room, extending the whole length of the building, was soon filled with domestic manufactures. Carpets and cloths, of every kind, quality and finish, evinced the ability of our country to be independent of foreign aid. The animals were of the first rate for size and beauty. The fat ox of Mr. Gridley was very superior: the work of Mr. Torrey, of Sangersfield, might stand

traded more eyes than even the dazzling plate. The whole filled the beautiful court yard which the liberality of our excellent judge had accorded for the occasion. The whole business of the two days was conducted with an order and decency, highly creditable to the character of our county, and much praise is due to the sheriff, who, at an early period, evinced his determination that no scenes of gambling, drunkenness, or immorality, should interrupt the proceedings or disgrace the occasion.

The ploughing matches proved that the ox may be trained to an equal pace with the horse. The premium plough, the name of which, however, is omitted, it is said, will be found to be the most perfect instrument of its kind ever exhibited in this county; it is an improvement on the famous Small's Scotch plough, and which is daily adopting by the farmers round Albany and other counties.

Agricultural Produce.—The following persons obtained premiums—Reuben Gridley, of Paris, for the best two acres of winter wheat, viz: 72 bushels to the acre.

Benjamin Northrop, of Deerfield, for raising 71½ bushels of wheat per acre.

Spring Wheat.—Jn. Wilcox, 44 bushels per acre; Isaac Miller, 34 bushels per acre.

Jos. Castleman, for 40 bushels of winter rye on an acre.

A. Kingsbury, of Boonville, and Joseph Phelps, of Paris, also gained premiums for spring rye, but the quantity per acre is not stated.

Indian Corn.—Samuel Carey, of Deerfield, raised 119 bushels on each of two acres; Asa Tyler, 111 bushels and 19½ quarts on each of two acres; A. Peck, 124 bushels on one acre; and John Bellinger, 119 bushels on one acre. These are excellent proofs of noble industry, and good cultivation.

Barley.—56 bushels and 28 quarts per acre, on 2 acres; and 60 bushels on one acre, were raised, the first by R. Southworth; the second by J. Sexton.

Oats.—84½ bushels were produced on each of two acres, by J. Sanger, and 83 do. on one acre, by D. Barton.

Peas.—Best two acres, D. Barton, 52 bushels per acre; 2d do. L. Hall, 51 per acre; on half an acre, G. A. Carey, 55 bushels per acre.

Potatoes.—Best one acre, Ab. Bartlett, 505 bushels; best half acre, C. Brooks, 571 bushels per acre; 2d do.

B. Allen 464 bushels per acre. Premiums were also given for the largest quantity and best quality of butter, and of cheese from one dairy, and in proportion to the number of cows. D. Barton had already made 3107 lbs. of butter from 21 cows. Nor was the great present to the American Farmer from Providence, maple sugar, forgotten in the list of premiums.

Mr. Jason Parker exhibited six acorn squashes, the produce of a single seed. The largest of these squashes measured 5 feet 9 inches in circumference, and weighed 100 lb. 4 oz.: the whole weighed 317 lbs.—several smaller ones grew on the same vine.

Domestic Animals.—36 premiums of different sums were awarded for the best specimens of various domestic stock.

Domestic Manufactures.—Cloths, flannels, pressed flannels, carpeting, table linen, linen sheeting, do. shirting, were shown, and premiums were awarded for the best of the several kinds.

As no building in the county could have contained a quarter of the spectators, a platform had been erected under some large locusts in the front of Judge Platt's house, on which the President occupied an elegant chair, made for the purpose, and

presented by Mr. Hurlburt, of New Hartford: on his right and left sat the Vice Presidents, and around him were placed the clergyman who honoured the society with their company. About \$800 worth of plate, assorted into 84 parcels, were arranged in three rows, on an elevated table immediately before the platform. Here the Treasurer and Secretaries were placed. Marshal Pease sat on an elegant steed, in an open area. The first circle was composed of the gentlemen officers of the 13th Regiment of Mi-

• The Cayuga Patriot says, that Samuel Chitsey, of Scipio, has raised this season, 133 bushels and ten quarts to the acre.

Eighty premiums from \$4 to \$30 were given for different subjects.

Show of Saratoga County.—Mr. Earl Stimpson had a premium awarded to him, for the best cultivated farm in the county—150 acres.

Indian Corn, 104½ bushels,*
Barley, 60½ do.
Spring Wheat, 26 do.
Potatoes, 714 do.
Beans, 40 do.
Grass, three tons.
Garden, 1 acre 50 rods.

Yard of poultry, 250 fowls.

The hills of corn were planted at the distance of 2 feet 8 inches apart. There were 285 pumpkins to the acre, which grew on the same land with the corn. A cabbage from Mr. Stimpson's garden which was exhibited at the fair, weighed 33½ lbs.

Saratoga, in the article of potatoes, has far exceeded Schenectady, Oneida, Otsego and Herkimer counties, as appears by the premiums awarded in each of these counties at the late Shows and Fairs, which were as follows:

Schenectady,	492 bushels per acre.
Oneida, the largest yield,	571 do. do.
Otsego,	600 do. do.
Herkimer,	622 do. do.
Saratoga,	714 do. do.

Those who recollect the admirable dry, mealy, well tasted potatoes, which are grown in the light soil of Saratoga county, will agree, that Mr. Stimpson has a great stock of a real luxury.

The fair of the Duaneburgh agricultural society for the county of Schenectady, was held in the town of Duaneburgh on the 14th October. The President of the society, G. W. Featherstonhaugh, Esq. delivered an address: exhibited samples of his Swedish turnip, weighing from 6 to 8 pounds, and stated they were computed, on as accurate a calculation as a growing crop would admit, to be standing on the ground at the rate of 1250 bushels to the acre.—The following premiums were awarded to the active and industrious farmer.

1st. Lewis Eaton, for the best cultivated farm,	280
2d. Archibald Buchanan best 4 acres of spring wheat—41 bushels and 15 quarts.	25
3d. John Tulloch, best acre of Indian corn—91 bushels and 12 quarts.	
4th. G. W. Featherstonhaugh, best acre of potatoes—402½ bushels,	20
5th. Thomas Liddle, best bull,	20
6th. Frederick F. Cady, best cow and calf,	20
7th. Lewis Eaton, best breed of hogs,	20
8th. Anson Eaton, for the greatest quantity of stone wall, in proportion to the size of the farm,	

9th. James Cantly, best road district,	15
Lewis Eaton, Esq. of Duaneburgh, pulled from his patch since the show, a Russia turnip measuring 28½ inches in circumference, and weighing 12 lbs. completely trimmed.	

Among the premiums awarded at the Otsego county show, were the following:

Oats.—95 bushels per acre, for largest quantity and best quality.

Indian Corn.—125 bushels and 26 quarts per acre; 109½ bushels: 108½ do.: 106 do. and 26 quarts per do.

104 and 9 quarts; 93½ bushels; 92 do.; 89 do.

Potatoes.—600 bushels per acre.

Turnips.—226 bushels, the best half acre.

At the show of the Rensselaer County Society,

besides the usual exhibition of farm stock and ploughing matches, a calf four months old, supposed to weigh 400 lbs, was shown by Mr. Colden: Colonel Pawling presented several squashes, weighing 107 lbs. 100 lbs. and 91 lbs.; there were twelve, the produce of two seeds, and weighed in the whole between 7 and 800 lbs. This has been the season of large squashes. Mr. Samuel Benjamin, of Livermore, Mass. raised 4 squashes from one seed, one of which weighed 160 lbs. the whole number weighed 433 lbs.

At the Genesee County Show, Captain D. Scott obtained the premium for the best farm. The visiting committee say, "It has not a parallel in the western district, for the display of agricultural taste, connected with economy and convenience." Some of the animals were remarkably fine, particularly the bulls and merino sheep.

On the Hessian-Fly,

AND ON THE PROPER DEPTH OF SOWING

WHEAT—No. VIII.

TO THE EDITOR OF THE AMERICAN FARMER.

Frederick County, Maryland, July 25th, 1820.

MR. SKINNER,

I observe in your paper, the American Farmer, No. 16 of Vol. 2, dated the 14th instant, that you have taken up the subject of that destructive insect to our wheat crops, the Hessian fly, on which subject and the proper depth of sowing, you promise to give us several pieces in proper order of connexion. Several of the pieces alluded to I have seen, and from my own observations in practical farming, think them useful and valuable communications. That piece which you place as No. 5, which was published in the first volume of the American Farmer, page 125, signed William Merriwether, came to my hands, at the very time when I was in the act of elucidating the manner and form of the growing of wheat from the grain till it branches, to an old farmer of my neighbourhood, with whom I had many a long argument, relative to deep and shallow seeding, &c. The elucidation given in the piece, and the delineation representing the growth of wheat from the grain, so exactly corroborated my argument, that the old farmer gave up his point, by saying that it might be so, but thought it very extraordinary that it could be so, and he never to have observed it. Our argument was more particularly on the effects or results, that deep or shallow seeding would have in keeping wheat from being thrown up by the winter's frosts.

I am fully satisfied by upwards of twenty years practice in farming, that the depth for seeding wheat recommended by Mr. Merriwether in the piece above alluded to, is the best depth for every purpose wherein there can be any effect, dependant on the depth that the grain is put in the ground, and am also satisfied that shallow seeding is advisable, in some degree, against the ravages of the fly. Nevertheless my own opinion is, that these ravages of the fly cannot be prevented effectually by any one act, nor by a number of acts, where wheat has been sown in a situation to be injured by them, without being acquainted or knowing the nature and propensities of the insect.

It will scarcely be denied by any rational man, that almost every species of animal, the feathered tribe and insects, are actuated by, what we call, instinct. Birds of different kinds have their peculiar choice in the situation for building their nests. The different nests of the same species of birds are uniform; the manner of propagating their young, feeding them and the choice of food, are all uniform, this we have reason to believe is instinct: therefore, we have sufficient reason also to believe, that every species of insect is also led on by instinct, to make choice of its food, to infest places and situations, proper or suitable for bringing into existence its progeny, &c. This once known, will naturally, and with much more certainty lead a farmer on to devise ways and means, in a great measure, to counteract them, and, which I believe, is in the power of almost every farmer who will give the subject due consideration, by observing the situation of fields of grain that have been materially injured by the fly.

Having for upwards of twenty years, paid particular attention to the subject, and tried numerous experiments to find out the nature and propensities of the insect, and by paying proper attention to the situation of fields to ascertain which would admit of early seeding and which would not, I have almost entirely escaped their ravages for the last eighteen or twenty years.

Every farmer should bear in mind, that of all kinds of vegetation that grow out of the earth, that of grain, to wit: wheat, rye, and barley, appears to suit them best; for although they infest almost every species of grass, where there is none of grain, yet as soon as the vegetation of grain appears, the greater bulk of the fly immediately leave all other vegetation, and resort to the grain, which appears more congenial to them, and when once in a field, they seldom leave it that season in search of any other; therefore the risk is great, when a field of wheat is sown early, and adjoining to fields which have considerable vegetation of grass on them, and no other vegetation of grain near; for it does not so much depend on the time of seeding your wheat, as it does on the situation of the field which is intended to be sown. As for instance a farmer sows his first field of wheat on the 20th of September, and the season favourable for its coming up; he sows an adjoining field with wheat on the 25th of September, only five days later than the first, yet the risk of the first sown field is more than double to the risk of the second; for the first sown field producing the first vegetation of grain, the fly that were harbouring in the grass of any other adjacent fields, will immediately resort to the grain, and having found the vegetation that suits them, they give over searching any farther; but on the contrary while ever there is no other vegetation but the grass, they are continually in search of that which suits them better, and having found it, as I before observed, they are content, and seek no farther; consequently the first sown field, above alluded to, having collected the bulk of the fly, the second sown field does not run half the risk of injury, by the fly, that the first sown field does.

A case of this kind occurring, might lead some

to believe that the 20th of September had been too early to seed because the fly had injured it, but that the 25th of September was not too early, because the second field was not injured, but the impression would be erroneous; for if he had not sown the first field until the 25th of September, and sown the second field five days after, the result would have been the same.

Another thing necessary for a farmer to bear in mind in seeding his farm, is, not to seed his fields promiscuously all over his farm, by first seeding a field on one side of his farm, the next seeding a field at the other side, and perhaps the last field sown adjoining to the first. The farmer who sows his fields in that manner, runs the greatest risk of the depredations of the fly; for he runs the risk of collecting the fall fly in every field sown by itself, and having his last sown field destroyed by the spring fly—for it may be proper here to note, that it is a rare instance to find two fields of wheat adjoining each other, and both to be good, when the one had been seeded early and the other late; for it will be found that the fly act on the same principle in the spring, that they do in the fall; for in the spring so soon as the most forward wheat or rye begins to joint, and the leaves or blades thereof are closed around the stalks, it then no more suits the fly to deposit their eggs, and they immediately go in search of that which is not yet jointed, and more tender; it is then that the late sown field adjoining the early sown is inviting them, and many a field in that situation, however flattering the prospect might have been, is entirely destroyed; it will always be found to be most advisable when seeding has commenced at any part of the farm, to continue seeding the next adjacent fields which are to be seeded, and to finish seeding the farthest off from the first seeding; always observing the rule never to have late sown grain, adjoining to any that had been early sown, and never to sow your first wheat very early, where you have reason to believe or know, that there are nurseries of the fly near at hand, such as fields having considerable vegetation of grass, grassy corn-fields, oats stubble, or other stubble field, having considerable volunteer grain coming up, and which are intended for fall pasture.

Great caution is also necessary with a farmer, who holds a small farm and farms in a small way, whose farm is situated or adjoining a large farm, on which there generally are large crops of corn raised. Part of the corn ground is generally early seeded with rye, to get that part of the seeding done with, before the regular seed time for wheat comes on; should that early seeding of rye be adjoining the small farm, on which wheat is intended to be sown, that wheat should be sown soon after the rye is well up, for if the wheat is kept out of the ground until late seed time, fearing it to be too soon to sow wheat, for fear of the fly destroying it, the owner may have the gratification of seeing his wheat look promising, until the early sown rye joints in the spring, when he will see all his hopes of a fine crop blasted, he will discover that his wheat begins to have a sickly appearance, it grows worse and worse daily; he is at a loss for the cause, but at length finds that the fly are in his wheat, he then supposes that a chance flight of the fly must have lit on his

wheat field, and are destroying it; and if he goes on year after year seeding his wheat in that situation, he will find that this supposed chance flight of fly, will find his fields of wheat almost every year; but if the wheat on the small farm, was sown soon after the early sown rye in the corn ground had come up, although rather early for seeding wheat, there still would be a much greater chance for the wheat keeping clear of injury by the fly; the early sown rye having collected the fly, the wheat although sown earlier than usual, does not run the same risk in the fall, that wheat sown in any other situation would do, and by not being much injured in the fall, and being early sown, it would also joint early in the spring, and be out of the way of the fly by the time they were leaving the early sown rye, and the fly would have to seek for some other field more congenial to them.

A gentleman living a few miles from where I live, is situated nearly similarly—holding a farm adjoining a large farm; he had entirely given up raising wheat in consequence of having it yearly destroyed by the fly. I happened to be at his house in the early part of the fall, about fifteen or eighteen years ago, when he mentioned the circumstance to me. We walked out into his fields, and he showed me a fallow nicely prepared, beside other fields in good order ready for seeding, and told me that it was his intention to sow down all his ground with rye, that he could not raise wheat. I suggested my ideas of the nature of the fly to him, and told him was it my land, I should seed it with wheat, without much apprehension of the fly. At my recommendation he seeded his fields with wheat, made a fine crop, and has continued making good crops of wheat every year since.

There is another circumstance which every farmer ought to be cautious of, which has caused the destruction of many a field of wheat by the fly. It often happens that fields are sown with wheat adjoining to stubble fields, on which there has come up much volunteer grain which had attracted the fly, and not having been pastured or fed down previous to seeding the wheat; but about the time that the wheat is well up, the stock is turned into the stubble field; the stock soon deprive the fly of their harbour by eating off the volunteer grain, the fly immediately go in search of another—they find the wheat in the adjoining field in a fit state for them, and they take immediate possession thereof.

These few remarks I have drawn up in a hurry, and, no doubt, if they should ever come under the eyes of men of learning, they will be found out of form and regularity: however, should the reader be able to judge what was intended to be said in the remarks, it is all I can expect, having no pretensions to grammatical writing. Should you think the above remarks worthy a place in your paper, the American Farmer, while treating on the subject, please to insert it whenever you think proper, as the production of a

FREDERICK COUNTY (Md.) FARMER.

FOR THE AMERICAN FARMER.

On the fitness of the *Multiflora*, or *Cherokee Rose*, for

HEDGES,

AND OF ITS MEDICINAL QUALITIES

Abbeville, S. C. July 12, 1820.

DEAR SIR—Having read Mr. Rowand's communication to you, in which he proposes the *rosa Multiflora** as a hedge fence, I would beg leave to suggest a few additional advantages which a fence of that description would have over all others.

Its growth is remarkably rapid, and would as Mr. Rowand states, form a fence under proper management in three years.

Its branches which ramify in a most astonishing manner, possess in common with the trunk innumerable thorns. These are its defences, and of which animals are extremely fearful. Even fowls I have observed to approach this hedge with the utmost precaution.

If then, this shrub forms a fence at once permanent and impenetrable, how superior must be its advantages over ordinary fences, when it is known that its petals, or flowers, of which it is so productive, constitute a valuable article in our domestic medicine.

The properties of the *rosa damascena* and *rosa rubra*, are known to most parents as a pleasant and useful laxative for children. The *Multiflora* possess these virtues in a high degree. The petals or flowers, when intended for medicinal use, should be gathered and dried in the shade, as I believe the action of the sun impairs and diminishes their virtues. An infusion of the flowers is perhaps the best mode in which this medicine can be given to children.

The dose should be governed entirely by the age, strength and habit of the child. In this way it manifests a cathartic quality, which by increasing the dose obviates costiveness in adults, and is never attended by tenesmus.

On distillation the flowers yield a fragrant leucytraceous oil, such as is brought to this country from India and sold at a very high price.—There are other officinal purposes to which the flowers of this new and beautiful fence could be appropriated, such as the *aqua rosa*, the aromatic cordial, the solutive honey, and the conserva rosa; but to give a minute direction in what way these are prepared would be an intrusion on the columns of your very useful paper.†

The plan suggested by Mr. Rowand, for the management of this fence, I suspect to be the best that could be adopted. I therefore beg leave to refer such as feel disposed to adorn their premises with this ornamental and very valuable fence, to his letter published in the tenth number and second volume of the American Farmer.

I am most respectfully
Yours, &c.
ELI S. DAVIS.

* See Mr. Anderson's letter in No. 15, of present volume.
Ed. Am. Farm.

† By no means Doctor—all good mothers and housewives, many of whom honour this journal with a careful perusal would join me, in thanks for minute directions in all such cases.
Ed. Am. Farm.

THE FARMER.

BALTIMORE, FRIDAY, AUGUST 18, 1820.

The report of George Webb Hall, Esq. in behalf of the agricultural associations of Great Britain and Ireland, making the first article in this paper, may serve to convey some useful hints, and prove a source of profitable reflection to those of our readers, who agree with us in believing that: While other classes of society are searching into their political titles, and *concerting* plans not only to fence in, but to extend the boundaries of their present political possessions. It may be well for those who follow the plough, to keep a sharp look out. The actual condition of the people of England, with scarcely any alternative but starvation or the gallows, should admonish American statesmen to beware of whatever policy may have conducted for many of them portions of that industrious and enterprising nation to famine and despair.

ERRATUM. For "Caudelle," read *Candolle*, in the letter signed James M. Garnett, published in number 18, volume II.

Present Prices of Country Produce in this Market.

Actual sales of WHEAT—WHITE, 90 to 94 cts.—RED, 85 to 90 cts.—CORN, 42 to 45 cts.—RYE, 40 to 42 cts.—OATS, 20 to 25 cts.—FLOUR from the wagons, \$4 50—WHISKEY, from do. 35 cts.—BUTTER, pr. lb. 20 to 25 cents.—EGGS, pr. doz. 12 to 15 cts.—VEAL, per lb. 6 to 8 cts.—LAMB, per quarter 37 $\frac{1}{2}$ to 50 cts.—BEEF, prime pieces 8 to 10 cts.—HAMS, 14 cts.—MIDDLEDS 10 cts.—LIVE CATTLE, \$6—CHICKENS, per doz. \$2 to \$2 50—POTATOES, 37 $\frac{1}{2}$ to 50 cts.—TAR \$2 25 scarce—TURPENTINE soft \$2 to \$2 25—SPIRITS do. 35 cts—PITCH, \$2 25—BACON, hog round 7 to 8 cts.—LARD, 11 to 12 cts.—PORK, prime 12 to 14 cts.—BLACK EYE PEAS 65 to 70 cents—SHINGLES, best Deep Creek, \$8 50—Do. small \$4 75 to \$5—FLOORING PLANK 5 1/2 \$2 25—London WHITE LEAD \$4 25—American do. \$3 75—Boiled OIL, \$1 37 $\frac{1}{2}$ —FEATHERS 50 to 62 $\frac{1}{2}$ cts.—SHAB, No. 1. trimmed, \$7—COTTON Upland, 20 to 21 cts.—Maryland TOBACCO, actual sales since last report 3 hhds. crop, 2 at \$12 50—1 do at \$13—2 do. at \$11 and \$12—2 do. at \$7 and \$11—1 do. at \$16 25, wagon, well fired—8 hhds. from Montgomery, 6 crop, at \$16—2 do seconds at \$8—2 do. from do. fired at \$17—2 do. at \$11 and \$13, from Anne Arundel—No sales of Virginia TOBACCO, that we have heard of.

KIRK'S PATENT THRESHING MACHINE AT EIGHTY DOLLARS.

Cutting Boxes for Straw, from \$7 50 to \$50—And a Straw and Ruta Baga Cutter, at \$30.

AT THE OLD STAND, M'ELDERY'S WHARF.

W.M. BROMWELL, Jun'r.

Has for Sale, very low, for Cash.

Wm. Kirk's Patent Threshing Machine, to work by hand.

J. Bromwell's Patent Self Feeding Wheat Fan, much esteemed by those who have used them,
Newly Invented Machine for cutting Straw, Ruta Baga, or other Vegetables.

Patent and common Straw Boxes.

Common Wheat Fans.

Wire Safes, Sieves assorted.

—ALSO—

Wove Wire, all sizes.

And Wire wove to order on the shortest notice.

August 18th, 1820.

BALTIMORE,

PUBLISHED EVERY FRIDAY,

BY JOHN S. SKINNER, EDITOR.